

# Dance Patterns

## Overview

Patterns are all around us! Take a look and you will see that they form the framework of much of the world around us. Look at your clothing. Are there patterns on the print? Or if you look closely, do you see patterns in the weave? What about your daily routine? Are there things that you do every day, and sequences that get repeated? When we walk, we place one foot in front of the other: right, left, right, left, and so on. Take a close look at nature, we see patterns in the structure of plants, waves in the ocean, an animal's fur, and a honeycomb. Patterns are everywhere! And learning to see them allows us to better understand processes and how to make abstractions.

Patterns are a framework for understanding math concepts: we see patterns when we add and multiply, and count with numbers. And patterns are also a critical aspect of computational thinking: when we decompose problems, we find patterns within them; and understanding these patterns allow us to design solutions, and create processes. We can look for patterns to understand how things are similar, and how they are different.

So with this activity, we are going to get moving! Dancing is a great way to learn patterns - we will design new dance moves by creating sequences of steps that get repeated, and use our pattern recognition skills to figure out what comes next.

You don't need anything! You can print off our dance cards, or just use them as a guide to creating fun dances on your own!

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## Setting Up

Find an area that you can move around freely; it is fine if space is limited, make sure the floor is clear.

## Discussion

What are patterns? We use patterns everyday...Look around, do you see any? Take some time to identify patterns around you. Next time you are out for a walk, look for patterns in nature. Why are patterns important?

In general, a pattern is something that is repeated at least once.

## Steps

1. We are going to explore patterns today, with some dance moves!

*I'll show you an example: (do the following)*

Clap twice

Tap your knees with your hand twice

(Repeat several times)

What comes next? How do you know? You know what comes next because you have watched this same pattern over and over. Our pattern here is very simple: we clap twice, then tap knees twice, clap twice, tap knees twice, etc.

You can think of it like this:

A A B B A A B B A A B B...and so on.

You can provide another example for the child(ren) here, and ask them to identify the pattern or ask what step would come next.

2. Look at the suggested dance steps in this doc. Together, go through the dance moves, and so everyone understands what they are.

Now may be a good time to get some music going!

Tell the child: Now I am going to make a pattern and I want you to tell me what it is!

*I can make a pattern by stringing together a few of these dance moves. For example I could:*

Clap 2 times  
Raise the roof 2 times  
Spin 1 time  
Clap 2 times  
Raise the roof 2 times  
Spin 1 time  
Clap 2 times  
Raise the roof 2 times  
Spin 1 time

*Do you see a pattern? What is the string of moves that gets repeated?*

(Clap 2 times, Raise the roof 2 times, Spin once)

Now create a new dance, either combining dance moves or looking at the suggested ones on the dance cards.

Go through the sequence several times, and ask - *do you see a pattern? What is it? Can you do the dance with me?*

Now switch and have the child create a dance, using patterns (or follow a dance card).

If you see the pattern, then you know the dance!

## **Extensions**

Try a dance, and after repeating a specific sequence a few times, randomly stop and see if the child knows the next move. They can either watch, or dance along with you when they understand the pattern.

Can you string a few pattern sequences together? You can place a few dance cards together! And look at them as you go so you don't get lost :)